

Title (en)
PROCESS FOR CONTINUOUSLY PREPARING DI-C1-3-ALKYL SUCCINATES

Title (de)
VERFAHREN ZUR KONTINUIERLICHEN HERSTELLUNG VON DI-C1-3-ALKYLSUCCINATEN

Title (fr)
PROCÉDÉ DE PRÉPARATION EN CONTINU DE SUCCINATES DI-C1-3-ALKYL

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Abstract (en)
[origin: WO2014180871A1] The invention relates to a process for continuously preparing di-C1-3-alkyl succinates by reacting succinic acid with an C1-3-alkanol in the presence of a fixed-bed heterogeneous acidic esterification catalyst in a tubular reactor at a temperature in the range of from 60 to 100°C, wherein a mixture, comprising succinic acid, C1-3-alkanol, mono-C1-3-alkyl succinate, di-C1-3-alkyl succinate and water, is formed in a mixing stage and fed to the entrance of the tubular reactor, and wherein 5 to 75% of the outlet flow rate of the tubular reactor are recycled directly to the mixing stage as a recycle stream, and the molar ratio of C1-3-alkanol to succinic acid added to the mixing zone, and not including the C1-3-alkanol and succinic acid at the recycle stream, being in the range of from 2.0 to 9.5. The invention furthermore relates to a process for separating the reactor effluent of an esterification of succinic acid with an C1-3-alkanol to give di-C1-3-alkyl succinates by distillation, wherein the separation is performed in a divided wall column in which C1-3-alkanol and water are removed in a top draw of the column, di-C1-3-alkyl succinate is removed in a side draw of the column, and wherein mono-C1-3-alkyl succinate and succinic acid are removed in a bottom draw of the column.

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